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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/732,293	12/08/2000	Timo Hanninen	59643.00657	2672
32294 7590 10/16/2007 SQUIRE, SANDERS & DEMPSEY L.L.P. 14TH FLOOR 8000 TOWERS CRESCENT TYSONS CORNER, VA 22182			EXAMINER HSU, ALPUS	
			ART UNIT 2619	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/732,293

Applicant(s)

HANNINEN ET AL.

Examiner

Alpus H. Hsu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-25, 27-32, 34-40 and 42 is/are rejected.
- 7) ☒ Claim(s) 26, 33 and 41 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 23-25, 27-32, 34-40 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over BALCK (of record) in view of ALPEROVICH (of record).

Referring to claim 23, BALCK discloses a network for communicating with a plurality of radiotelephones (46s) via respective communication channels over a carrier, wherein the channels can operate at a first or second data rate such that the carrier can transmit a single communication channel operating at the first data rate or two communication channels operating at the second data rate (page 13, lines 19-23), the network comprising a controller (38 and/or 42) responsive to a channel request and handover decision to generate a command for a change in the data rate of a transmitted channel from the first data rate to the second data rate (page 11, line 23 to page 12, line 10).

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BALCK differs from the claim, in that, it does not disclose an initiation of a call with a second network for initiating a change in the data rate of a transmitted channel. However, BALCK does disclose the controller interfaces with other controllers and/or other telecommunications networks via a gateway mobile switching center (page 6, lines 15-25). It is also well known in the art to initiate a call connection between two subscribers in two different networks which involves the data rate change for congestion control.

ALPEROVICH, for example, from the similar field of endeavor, teaches the initiation of a call between two subscribers for initiating a change in the data rate of a transmitted channel from full rate to half rate (col. 2, lines 20-41, col. 6, line 35 to col. 8, line 67) to effectuate a new call connection between two subscribers to increase the call capacity when congested.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the feature of initiation of a channel between subscribers in different networks as in ALPEROVICH for initiating a change in the data rate of a transmitted channel when necessary to further improve the system call capacity and transmission efficiency.

Referring to claim 24, BALCK discloses the communication channels are timeslots on the carrier (page 8, lines 10-11).

Referring to claim 25, BALCK discloses that the channels can operate at a first or second data rate such that a timeslot on the carrier can transmit a single communication channel operating at the first data rate or two communication channels operating at the second data rate (page 8, lines 15-17).

Referring to claim 27, BALCK discloses the first data rate is a full speech rate and the second data rate is a half speech rate (page 8, lines 7-22)

Referring to claim 28, BALCK discloses that the controller is responsive to the number of channels established in the network exceeding a predetermined threshold for initiating a change in the data rate of the transmitted channel from the first data rate to the second data rate (page 9, lines 3-24, page 10, line 25 to page 11, line 22, page 13, lines 3-16).

Referring to claim 29, BALCK discloses that the change of data rate of a transmitted channel is performed for a connection between subscribers within the network (page 10, lines 19-20).

Referring to claims 30 and 42, BALCK discloses a controller (38 and/or 42) for operation in a network wherein the network communicates with a plurality of radiotelephones (46s) via respective communication channels over a carrier, the channels being operable at a first or second data rate such that the carrier can transmit a single communication operating at the first data rate or two communication channels operating at the second data rate (page 13, lines 19-23).

BALCK differs from the claim, in that, it does not disclose an initiation of a call with a second network for initiating a change in the data rate of a transmitted channel. However, BALCK does disclose the controller interfaces with other controllers and/or other telecommunications networks via a gateway mobile switching center (page 6, lines 15-25). It is also well known in the art to initiate a call connection between two subscribers in two different networks which involves the data rate change for congestion control.

ALPEROVICH, for example, from the similar field of endeavor, teaches the initiation of a call between two subscribers for initiating a change in the data rate of a transmitted channel from full rate to half rate (col. 2, lines 20-41, col. 6, line 35 to col. 8, line 67) to effectuate a new call connection between two subscribers to increase the call capacity when congested.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the feature of initiation of a channel between subscribers in different networks as in ALPEROVICH for initiating a change in the data rate of a transmitted channel when necessary to further improve the system call capacity and transmission efficiency.

Referring to claim 31, BALCK discloses the communication channels are timeslots on the carrier (page 8, lines 10-11).

Referring to claim 32, BALCK discloses that the channels can operate at a first or second data rate such that a timeslot on the carrier can transmit a single communication channel operating at the first data rate or two communication channels operating at the second data rate (page 8, lines 15-17).

Referring to claim 34, BALCK discloses the first data rate is a full speech rate and the second data rate is a half speech rate (page 8, lines 7-22)

Referring to claim 35, BALCK discloses that the controller is responsive to the number of channels established in the network exceeding a predetermined threshold for initiating a change in the data rate of the transmitted channel from the first data rate to the second data rate (page 9, lines 3-24, page 10, line 25 to page 11, line 22, page 13, lines 3-16).

Referring to claim 36, BALCK discloses that the change of data rate of a transmitted channel is performed for a connection between subscribers within the network (page 10, lines 19-20).

Referring to claim 37, BALCK discloses a radiotelephone (46) for operation with a network which initiates a change in data rate of a channel from a first data rate to a second data rate in response to a channel request and handover decision (page 11, line 23 to page 12, line 10),

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comprising a controller (92) responsive to a signal from the network for changing the data rate of data being transmitted on a channel from a radiotelephone.

BALCK differs from the claim, in that, it does not disclose an initiation of a call with a second network for initiating a change in the data rate of a transmitted channel. However, BALCK does disclose the controller interfaces with other controllers and/or other telecommunications networks via a gateway mobile switching center (page 6, lines 15-25). It is also well known in the art to initiate a call connection between two subscribers in two different networks which involves the data rate change for congestion control.

ALPEROVICH, for example, from the similar field of endeavor, teaches the initiation of a call between two subscribers for initiating a change in the data rate of a transmitted channel from full rate to half rate (col. 2, lines 20-41, col. 6, line 35 to col. 8, line 67) to effectuate a new call connection between two subscribers to increase the call capacity when congested.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the feature of initiation of a channel between subscribers in different networks as in ALPEROVICH for initiating a change in the data rate of a transmitted channel when necessary to further improve the system call capacity and transmission efficiency.

Referring to claim 38, BALCK discloses a method of communicating with a plurality of radiotelephones (46s) via respective communication channels over a carrier, wherein the channels can operate at a first or second data rate such that the carrier can transmit a single communication channel operating at the first data rate or two communication channels operating at the second data rate (page 13, lines 19-23).

BALCK differs from the claim, in that, it does not disclose an initiation of a call with a second network for initiating a change in the data rate of a transmitted channel. However, BALCK does disclose the controller interfaces with other controllers and/or other telecommunications networks via a gateway mobile switching center (page 6, lines 15-25). It is also well known in the art to initiate a call connection between two subscribers in two different networks which involves the data rate change for congestion control.

ALPEROVICH, for example, from the similar field of endeavor, teaches the initiation of a call between two subscribers for initiating a change in the data rate of a transmitted channel from full rate to half rate (col. 2, lines 20-41, col. 6, line 35 to col. 8, line 67) to effectuate a new call connection between two subscribers to increase the call capacity when congested.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the feature of initiation of a channel between subscribers in different networks as in ALPEROVICH for initiating a change in the data rate of a transmitted channel when necessary to further improve the system call capacity and transmission efficiency.

Referring to claim 39, BALCK discloses the communication channels are timeslots on the carrier (page 8, lines 10-11).

Referring to claim 40, BALCK discloses the channels can operate at a first or second data rate such that a timeslot on the carrier can transmit a single communication channel operating at the first data rate or two communication channels operating at the second data rate (page 8, lines 15-17).

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4. Claims 26, 33 and 41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Applicant's arguments filed July 27, 2007 have been fully considered but they are not persuasive.

In the remark, the applicant first argued that the cited Balck and Alperovich references fail to teach or suggest in accordance with one embodiment of the present invention, which includes a wireless Intranet office (WIO) network having a gatekeeper, which is capable of dynamically allocating channels to optimize capacity by allocating connections to full-rate or half-rate channels. The deterioration in speech quality caused by changing to a half-rate channel in a connection between two subscribers within the WIO network is lower than the deterioration resulting when one of the subscribers is in the GSM network. Therefore, in a situation where a channel is initiated with a second network, i.e., the GSM network, the gatekeeper will lower the data rate of an existing channel within the WIO network in order to allocate a full-rate channel to the connection with the GSM network. Accordingly, one of the many advantages of the embodiments of the present invention is to optimize the capacity of two networks while maximizing the quality of the connections. The examiner disagrees since such feature was not claimed in the instant application.

Secondly, the applicant argued that Balck and Alperovich, individually or combine, do not teach or suggest all the recitations of the independent claims. As correctly recognized in the Office Action, Balck does not teach or suggest, at least, "a controller...in response to an initiation of a call with a second network, configured to initiate a change in a data rate of a transmitting

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channel from the first data rate to the second data rate," as recited in independent claim 23.

Rather than changing the data rate of a transmitting channel, when the determined traffic load exceeds a threshold (16), Balck hands over a higher rate traffic channel over which a dual rate mobile station is communicating to a lower rate traffic channel available in that cell area (18).

However, although Balck clearly fails to teach such recitation of independent claim 23, the Office Action attempts to extend the scope of Balck by contending that "Balck does disclose the controller interfaces with other controllers and/or other telecommunications networks via a gateway mobile switching center (page 6, lines 15-25). It is also well known in the art to initiate a call connection between two subscribers in two different networks which involves the data rate change for congestion control." However, it is irrelevant whether the controller of Balck interfaces with other controllers and/or networks and initiating a call connection involving a change in data rate when Balck is fundamentally silent as to teaching or suggesting an initiation of a change in a data rate of a transmitting channel from the first data rate to the second data rate as in the present application. The examiner also disagrees since it is well known in the art to initiate a call connection between two subscribers in two different networks which involves the data rate change for congestion control and bandwidth allocation maximization. It would be relevant and obvious to one ordinary skill artisan to change data rate of a call connection between two subscribers in Balck if the change is needed and permitted in order to prevent congestion or maximize bandwidth allocation.

Thirdly, the applicant also argued that Alperovich fails to teach or suggest the changing of the data rate of a transmitting channel from the first data rate to the second data rate because in Alperovich, the data rate of the main channel (the channel from which the sub-channel was

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divided from) is still operating at the same data rate. There is no change in the data rate in the main channel. The examiner also disagrees since by the broadest interpretation, as long as the data rate has been changed in the same channel as in Alperovich, it would still meet the claim limitation of changing of the data rate of a transmitting channel from the first data rate to the second data rate.

In view of the above reasoning, the examiner believes that the 103(a) rejections regarding claims 23-25, 27-32, 34-40 and 42 should be sustained.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

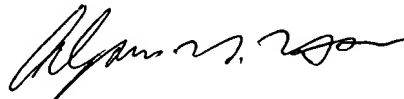
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alpus H. Hsu whose telephone number is (571)272-3146. The examiner can normally be reached on M-F (5:30-3:00) First Friday Off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571)272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AHH



Alpus H. Hsu
Primary Examiner
Art Unit 2619